Environmental Pollution **68** (1990) 479–481

CONTENTS OF VOLUME 68

Numbers 1 & 2

The Effects of Sulphur Dioxide on the Parasitism of the Rust Fungus *Uromyces viciae-fabae* on *Vicia faba* 1
GIACOMO LORENZINI, ROSANGELA FARINA & LUCIA GUIDI (Italy)

Microbial Transformation of Thiocyanate 15
Y. L. PARUCHURI, N. SHIVARAMAN & P. KUMARAN (India)

Forest Responses to Tropospheric Ozone and Global Climate Change: An Analysis 29
RONALD N. KICKERT & SAGAR V. KRUPA (USA)

The Biodegradation of Morpholine in River Water and Activated Sludge . . 67
JEREMY S. KNAPP & ALISON J. WHYTELL (UK)

Epiphyte Recolonization of Oaks along a Gradient of Air Pollution in South-East England, 1979–1990 81
J. W. BATES, J. N. B. BELL & A. M. FARMER (UK)

Rodenticides in British Barn Owls 101
I. NEWTON, I. WYLLIE & P. FREESTONE (UK)

Derivation of Soil to Plant Transfer Factors of Radiocesium in Northern Greece after the Chernobyl Accident, and Comparison with Greenhouse Experiments . 119
M. ANTONOPOULOS-DOMIS, A. CLOUVAS & A. GAGIANAS (Greece)

Phytoplankton Succession during Acidification With and Without Increasing Aluminum Levels. 129
K. E. HAVENS & R. T. HEATH (USA)

The Influence of Application Rate on the Bacterial Mutagenicity of Soil Amended with Municipal Sewage Sludge 147
K. C. DONNELLY, J. C. THOMAS, C. S. ANDERSON & K. W. BROWN (USA)

Elemental Analysis of Airborne Particulates in Chile 161
CARLOS M. ROMO-KRÖGER (Chile)

Environ. Pollut. **(68)** (1990)—© 1990 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Adsorption–Desorption Behaviour of Zinc(II) at Iron(III) Hydroxide–Aqueous Solution Interface as Influenced by pH and Temperature 171
ANJANA SRIVASTAVA & P. C. SRIVASTAVA (India)

Selected Bibliography 181

Book Reviews 184

Numbers 3 & 4

Special Issue on The Hohenheim Long-term Experiment

Foreword 193

Introduction 195
U. ARNDT & G. SEUFERT (Germany)

General Methods and Materials 205
G. SEUFERT, V. HOYER, H. WÖLLMER & U. ARNDT (Germany)

Flow Rates of Ions in Waters Percolating Through a Model Ecosystem with Forest Trees 231
G. SEUFERT (Germany)

Mineral Content in the Soil and Tree Foliage 253
H. SCHÄTZLE, G. SEUFERT, J. BENDER, G. GROß, U. ARNDT & H. J. JÄGER (Germany)

CO_2/H_2O Gas Exchange Parameters of One- and Two-year-old Needles of Spruce and Fir 275
B. SCHWEIZER & U. ARNDT (Germany)

Chlorophyll, Carotenoids and the Activity of the Xanthophyll Cycle . . . 293
DOROTHEA SIEFERMANN-HARMS (Germany)

Energy and Redox Status, and Carbon Allocation in One- to Three-year-old Spruce Needles 305
R. HAMPP, W. EINIG & B. EGGER (Germany)

Physiology of Young Norway Spruce 319
E. BERMADINGER, H. GUTTENBERGER & D. GRILL (Austria)

Analyses of Enzyme Activities and Other Metabolic Criteria After Five Years of Fumigation 331
J. BENDER, R. MANDERSCHEID & H. J. JÄGER (Germany)

Structural Changes in Spruce and Fir Needles 345
U. SCHMITT & M. RUETZE (Germany)

Visible Injury Responses 355
U. ARNDT, N. BILLEN, G. SEUFERT, W. LUDWIG, K. BORKHART & B. OHNESORGE (Germany)

Monoterpene Patterns of Different Tissues and Plant Parts of Norway Spruce (*Piceas abies* L. Karst) 367
ULRIKE BUFLER, GÜNTHER SEUFERT & FRIEDRICH JÜTTNER (Germany)

Monoterpenes and Microbial Metabolites in the Soil 377
FRIEDRICH JÜTTNER (Germany)

Fine Root Studies *in situ* and in the Laboratory 383
H. WÖLLMER & I. KOTTKE (Germany)

Mycorrhizal Populations and Fine Root Development on Norway Spruce Exposed to Controlled Doses of Gaseous Pollutants and Simulated Acidic Rain Treatments 409
HELMUT BLASCHKE (Germany)

Performance of Some Growth Variables 419
NORBERT BILLEN, HUBERT SCHÄTZLE, GÜNTHER SEUFERT & UWE ARNDT (Germany)

Synoptic Discussion of Methods and Results 435
U. ARNDT (Germany)

The Hohenheim Long-term Experiment: A North American Perspective . . 453
SAGAR V. KRUPA (USA)